

### **REMARKS**

Claims 1, 3-11, and 13-30 are pending. Claims 1, 4-9, 11, and 19-30 are rejected. Objected to are claims 3, 10, and 13-18. Claims 10, 17, 18, 19, 27 and 30 have been amended. No new matter has been added.

Importantly, any claim amendments and/or cancellations made herein should not be construed to be an acquiescence to any of the claim rejections. Rather, these actions are being made solely to expedite the prosecution of the above-identified application. The Applicants expressly reserve the right to further prosecute the same or similar claims in subsequent patent applications claiming the benefit of priority to the instant application (35 USC § 120).

### **CLAIM OBJECTIONS**

The Examiner has objected to claims 10, 18, and 30 for being illegible. Claims 10, 18, and 30 have been amended to address the Examiner's objections. Specifically, new compound structures have been provided. Therefore, the Applicants respectfully request the Examiner withdraw his objections to claims 10, 18, and 30.

The Examiner has objected to claim 17 because it does not end in a period. Claim 17 has been amended to correct the typographical error by removing the "and" at the end of the paragraph. Amended claim 17 ends in a period. Therefore, the Applicants respectfully request the Examiner withdraw his objection to claims 17.

### **CLAIM REJECTIONS BASED ON 35 USC § 112¶2**

Claims 19-30 are rejected as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. Independent claims 19 and 27 are explicitly rejected, while claims 20-26 and 28-30 are rejected for depending on rejected independent claims 19 and 27.

In particular, the Examiner asserts that independent claim 19 is indefinite because it is "unclear about how said compounds are combined with each other as opposed to how the

compounds are made to react”. In addition, the Examiner asserts that independent claim 27 is indefinite because it is “unclear how said mannopyranose is bound to said support.” The Applicants respectfully traverse.

Solely to expedite prosecution of the application, the Applicants have amended claim 19 to recite that the two sugars are admixed, followed addition of *N*-iododuccinimide and silver triflate. Miriam-Webster’s Online dictionary defines admix as “the action of mixing” and thus admixing properly describes how said compounds are combined with each other. Support for the components being mixed together can be found throughout the application, including in Scheme 5 and Example 4. This amendment does not change the scope of the pending claims. The Applicants believe the amended claim clearly indicates how said compounds are combined with each other and respectfully requests the Examiner withdraw his rejections of claims 19-26 based on 35 USC § 112¶2.

Solely to expedite prosecution of the application, the Applicants have amended claim 27 to claim a method wherein the mannopyranoside is covalently bound to said solid support. Support for a mannopyranoside being covalently bound to a solid support can be found throughout the application, including Scheme 4.10 on page 19, which describes the automated synthesis of GPI 46. Importantly, the amended claim clearly indicates how said mannopyranose is bound to said solid support. Based on the amendment just described, the Applicants respectfully request the Examiner withdraw his rejections of claims 27-30 based on 35 USC § 112¶2.

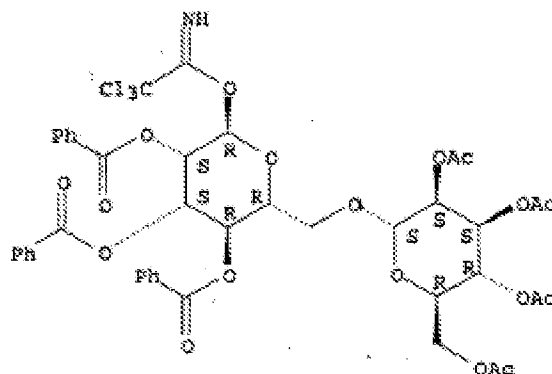
#### **CLAIM REJECTIONS BASED ON 35 USC § 102(b)**

The Examiner has rejected claims 1, 4-6, 8 and 9 as being anticipated by Jaworek *et al.* (*Carbohydrate Res.* **2001**, 331, 375-391). Specifically, the Examiner asserts that Jaworek on page 376 (compound **3**) teaches a compound which falls within the scope of formula **I** wherein *n* is 1, R is H, R<sup>1</sup> and R<sup>2</sup> taken together are P(O)OH, R<sup>3</sup> is amino, and R<sup>4</sup> is H. The Applicants respectfully traverse.

In addition, the Examiner has rejected claims 1, 3-5, 8, and 9 as being anticipated by Martin-Lomas *et al.* (*Chem. Eur. J.* **2000**, 6(19), 3608-3612). Specifically, the Examiner asserts

that Martin-Lomas on page 3609 (compound 2) teaches a compound which falls within the scope of formula I wherein n is 3, R is H, R<sup>1</sup> and R<sup>2</sup> taken together is P(O)OH, R<sup>3</sup> is amino, and R<sup>4</sup> is H. The Applicants respectfully traverse.

Lastly, the Examiner has rejected claim 11 as being anticipated by Kong *et al.* (CN 1297892, abstract only). The abstract of the Kong patent, which was provided by the Examiner, contained one compound as shown below:



The Examiner asserts that this compound which falls within the scope of claim 11. The Applicants respectfully traverse.

After the rejection based on Kong, on page 8 of the instant action, the Examiner indicates that Rademacher *et al.* discloses a compound of formula II wherein n is 1, R is aryl (phenyl) and R is -C(O)-alkyl (C(O)methyl), and R<sup>1</sup> is trichloroacetimidate (trichloroethaimidate). Rademacher *et al.* (WO 01/85745 A1) was cited in the previous action, but therein the Examiner did not cite a compound of formula II as described in the instant action. In addition, the Applicant was unable to find a compound of formula II wherein n is 1, R is aryl (phenyl) and R is -C(O)-alkyl (C(O)methyl), and R<sup>1</sup> is trichloroacetimidate (trichloroethaimidate) in Rademacher. The Applicants respectfully request that the Examiner indicate which compound or compounds in Rademacher anticipate the pending claims.

To anticipate a claim under §102(b), a reference must teach each and every element of the claim, either expressly or inherently. M.P.E.P. § 2131. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union oil Co. of California*, 8144. F. 2d 628, 631,

2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Furthermore, “[t]he identical invention must be shown in as complete detail as contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1566 (Fed. Cir. 1990).

Solely to expedite the prosecution of this application, the Applicants have amended independent claim 1 so that R<sup>4</sup> can not be H; and further amended independent claim 11 so that n can not be 1. As the compounds cited by the Examiner do not fall within the scope of the amended claims, the cited art is thus not anticipatory. Therefore, the Applicants respectfully request the Examiner withdraw his rejections of claim 1, 3-6, 8, 9 and 11 under 35 USC § 102(b) based on Jaworek, Martin-Lomas, and Kong.

#### **CLAIM REJECTIONS BASED ON 35 USC § 103(a)**

The Examiner has rejected claim 7 as being unpatentable over Jaworek *et al.* (*Carbohydrate Res.* **2001**, 331, 375-391). The Examiner asserts that the difference between the claimed compounds and the compound taught by Jaworek is that the claimed compounds are the ammonium halide salts. The Applicants respectfully traverse.

In support of their analysis, the Applicants respectfully remind the Examiner that in order to form the basis of a proper rejection under 35 U.S.C. § 103(a), the reference or references must teach all of the limitations of the claim. *See In re Zurko*, 111 F.3d 887, 888-889, 42 U.S.P.Q. 2d 1476, 1478 (Fed. Cir. 1997); and *MPEP 2143.03* (“[t]o establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981.”). In addition, if an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. *See In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); and *MPEP 2143.03*.

As mentioned above, claim 1 has been amended so that the Jaworek compound cited by the Examiner does not fall within the scope of the amended claim. Therefore, Jaworek alone does not teach all of the limitations of independent claim 1, nor does its dependent claims (e.g. claim 7). Accordingly, the Applicants respectfully request the withdrawal of the rejection under of claim 7 under 35 U.S.C. § 103(a) based upon Jaworek.

### **ALLOWABLE SUBJECT MATTER**

The Applicants note with appreciation that the Examiner has indicated that claims 3, 10, 13-18 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

### **FEES**

Apart from the one-month extension of time requested herewith, the Applicants believe there are no additional fees required in connection with the filing of this paper. Nevertheless, the Director is hereby authorized to charge any additional required fee to our Deposit Account, **06-1448**, Reference **MTV-055.01**.

### **CONCLUSION**

In view of the above remarks, it is believed that the pending claims are in condition for allowance. The Applicants respectfully request reconsideration and withdrawal of the pending rejections. The Applicants thank the Examiner for careful consideration of the present case. If a telephone conversation with the Applicants' Agent would expedite prosecution of the above-identified application, the Examiner is urged to contact the undersigned.

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